Wherefore, what is claimed is:

1. A graphic user interface for querying a database of media that is tagged with geographic location information and displaying the query results, comprising

interchangeable panels that are used for determining query constraints and viewing query results of a database of media that is tagged with geographic location information; and

media dots that are aligned with a grid that encompasses the geographic location information of the media in the database, wherein said media dots indicated how many media are associated with a grid location on the map.

2. The graphics user interface of Claim 1 further comprising a reflective user interface that shows how query constraints and query results are related through cursor interaction.

3. The graphics user interface of Claim 1 wherein the interchangeable panels comprise one or more constraint panels and one or more display panels.

4. The graphics user interface of Claim 3 wherein the constraint panels allow a user to define the constraints of a database query.

5. The graphics user interface of Claim 3 wherein the constraint panels allow a user to define database search constraints to include one or more of:

map related to the map where a database item was captured;

timeline related to a significant event corresponding to a database item;

person related to a database item;

keyword related to a database item; and

media type of a database item.

6. The graphics user interface of Claim 3 wherein the display panels show the results a database query that is jointly specified by one or more constraint panels.

7. The graphics user interface of Claim 6 wherein a float mode can be invoked that allows a user to navigate a constraint panel without eliciting a database query.

8. The graphics user interface of Claim 3 wherein a display panel can be one of:

a full view panel that brings a database item to full view at a high resolution;

a list panel that shows the results of a database query as a list of small thumbnails; and

a preview panel that shows a preview of a single database item together with a textual display of the database item's properties.

9. The graphic user interface of Claim 1 further comprising a primary window for displaying one or more of said interchangeable panels.

10. The graphic user interface of Claim 6 further comprising one or more periphery windows that are smaller than said primary window for displaying one or more of said interchangeable panels.

11. The graphic user interface of Claim 1 wherein the number of query results are limited to a given number.

12. The graphic user interface of Claim 11 wherein the given number is specified by a user.

13. The graphic user interface of Claim 11 wherein a parallel query is conducted whose purpose is to count the data each time a database query occurs in order to determine media dot placement and size.

14. A graphic user interface for displaying data from a database of media that is tagged with geographic location information, comprising media dots that are aligned with a grid that encompasses the geographic location

information of the media in the database, wherein said media dots indicated how many media are associated with a grid location on the map.

15. The graphic user interface of Claim 14 wherein each media dot is a scale-adaptive two dimensional histogram.

16. The graphic user interface of Claim 14 wherein each map is gridded with a regular grid where cell size is greater than a single pixel on a display.

17. The graphic user interface of Claim 16 wherein cell size what 10 pixels.

18. The graphic user interface of Claim 14 wherein the diameter of the media dot varies with the number of media items it represents.

19. The graphic user interface of Claim 18 wherein the media dot's diameter, d, is varied logarithmically with the number of items it represents.

20. The graphic user interface of Claim 19 wherein

$$d = \begin{cases} 0 & \text{if } n = 0 \\ a\log(n) + k, & \text{otherwise} \end{cases}$$

where n is the number of items, a is a multiplicative constant, and k is the minimum size of a dot representing one item.

21. The graphic user interface of Claim 14 wherein media dots are limited to represent database items that are at the resolution of the media dot or finer.

22. A graphic user interface for querying and displaying data from a database of media, comprising a reflective feature that shows how query constraints and query results are related through computer input device interaction.

23. The graphic user interface of Claim 22 wherein when a user passes a computer input device over any database item in a window, information related to the database item will be highlighted in other windows containing information on that database item.

24. A graphic user interface for querying a database of media that is tagged with geographic location information and displaying the query results, comprising:

interchangeable panels that are used for determining query constraints and viewing query results of a database of media that is tagged with geographic location information; and

media dots that are aligned with a grid that encompasses the geographic location information of the media in the database, wherein said media dots indicate how many media are associated with a grid location on the map; and

a reflective feature that shows how query constraints and query results are related through computer input device interaction wherein when a user passes a computer input device over any database item in a window, information related to the database item will be highlighted in other windows containing information on that database item.

R1.26

25. ~~26.~~ A graphic user interface for querying a database of media that is tagged with geographic location information and displaying the query results, comprising:

interchangeable panels that are used for determining query constraints and viewing query results of a database of media that is tagged with geographic location information; and

a reflective feature that shows how query constraints and query results are related through computer input device interaction wherein when a user passes a computer input device over any database item in a window, information

related to the database item will be highlighted in other windows containing information on that database item.